

Amendments to the Claims

The following listing of the claims will replace all prior versions, and listings of the claims in the application:

Listing of Claims

1. (Previously Presented) An optical disc drive comprising:
 - a laser light source for emitting a laser beam of which the intensity is changeable with the amount of drive current supplied thereto;
 - a first photodetector, which receives a portion of the laser beam that has been emitted from the laser light source and then reflected from an optical disc, thereby generating a readout signal;
 - a second photodetector, which receives another portion of the laser beam that has been emitted from the laser light source, generates an electric signal of which the level represents the power of the laser beam received, and outputs the electric signal as a light quantity detection signal; and
 - a feedback control loop, which compares the level of the light quantity detection signal with a predetermined target value and controls the amount of the drive current so that the level of the light quantity detection signal approaches the target value,
wherein in reading data from the optical disc, the target value is changed so as to compensate for a variation of the sensitivity of the second photodetector, thereby controlling the power of the laser beam emitted from the laser light source, said variation of the sensitivity of the second photodetector being detected when a write power optimization is conducted.
2. (Original) The optical disc drive of claim 1, wherein the target value is set to a lower value as the sensitivity of the second photodetector decreases from its initial value.
3. (Previously presented) The optical disc drive of claim 1, comprising:
target value setting means for sequentially changing the target value in writing data on the optical disc and eventually the power of the laser beam emitted from the laser light source;

means for writing information on the optical disc with the power being changed sequentially;

best power searching means for determining the best target value to write the data on the optical disc by the readout signal obtained from the information that has been written on the optical disc; and

means for determining a target value for reading the data from the optical disc based on the best target value to write the data on the optical disc.

4. (Previously presented) The optical disc drive of claim 1, wherein the target value for reading the data from the optical disc is defined to be a constant number of times as large as the best target value to write the data on the optical disc.

5. (Original) The optical disc drive of claim 3, wherein the best power searching means determines the best target value to write the data on the optical disc by the alternating current amplitude of the readout signal.

6. (Original) The optical disc drive of claim 3, wherein the best power searching means determines the best target value to write the data on the optical disc by a duty ratio of the readout signal.

7. (Original) The optical disc drive of claim 3, further comprising a memory element to store a value representing a difference between a target value, which is derived from information that is pre-stored on the optical disc about the power of the laser beam in writing the data on the optical disc, and the target value determined by the best power searching means.

8. (Original) The optical disc drive of claim 7, wherein the value stored on the memory element is recorded as management information on the optical disc.

9. (Previously presented) The optical disc drive of claim 7, wherein the target value, derived from the information that is pre-stored on the optical disc, is corrected with the value stored on the memory element to represent the difference, and

wherein the corrected target value is used in reading the data from the optical disc.

10. (Original) The optical disc drive of claim 9, further comprising:
decision means for obtaining a timer upper limit value using the value stored on the memory element to represent the difference; and
a timer, which keeps counting until its count reaches the timer upper limit value,
wherein when the count of the timer reaches the timer upper limit value, the value stored on the memory element to represent the difference is updated into a new value.

11. (Currently Amended) A method for driving an optical disc drive that includes a laser light source, a first photodetector, a second photodetector and a feedback control loop, wherein the laser light source emits a laser beam of which the intensity is changeable with the amount of drive current supplied thereto; the first photodetector receives a portion of the laser beam that has been emitted from the laser light source and then reflected from an optical disc, thereby generating a readout signal; the second photodetector receives another portion of the laser beam that has been emitted from the laser light source, generates an electric signal of which the level represents the power of the laser beam received, and outputs the electric signal as a light quantity detection signal; and the feedback control loop compares the level of the light quantity detection signal with a predetermined target value and controls the amount of the drive current so that the level of the light quantity detection signal approaches the target value,
the method comprising the steps of:
sensing a decrease in the sensitivity of the second photodetector while ~~reading data from writing data to~~ the optical disc;
decreasing the target value as the sensitivity of the second photodetector decreases; and
regulating the amount of the drive current such that the level of the light quantity detection signal approaches the decreased target value while reading the data from the optical disc, thereby controlling the power of the laser beam emitted from the laser light source.